

Work Order ID 115837

April-04-14 10:22:55 AM

D3196-1

B415837

115837

Page 1

Item ID: D3196-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bar

Start Date: 4/25/14 Start Qty: 4.00 *4*

Cust Item ID:

Required Date: 4/25/14 Req'd Qty: 4.00 *4*

Customer:

Reference:

Approvals: Process Plan: MLS Date: 4-04-09

Tooling:

Date:

Run Start *NR1*

QC: Date: SPC (Y/N):

Date:

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3196 | Rev C |

100

0.00

100

BAND SAW

and 14/05/10

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blank: (0.75" x 1.50") x 26.200" long Bar

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine D3196-1 as per Folio FA339 and Dwg D3196Identify as D3196-12-Debur

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | |
|--|--|---|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> |
|--|--|---|

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|---|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence |
| <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge </div> <div> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other </div> </div> | | |

Work Order ID 115837

April-04-14 10:22:55 AM

115837

Page 2

Item ID: D3196-1 Accept ***N19000040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bar
 Start Date: 4/25/14 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 4/25/14 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|-------------------|
| 130 | QC8- Inspect parts - second check | 0.00 | | | | 4 | 0 | | DAS 14 9-89 |
| *130* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | 14/05/15 |
| Quality Control | | | | | | | | | |
| 140 | Chemical Conversion Coat per QSI005 4.1 | 0.00 | | | | 4 | | | 7/6/14-5-16 |
| *140* | | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | | | | | | | | | |
| 150 | Grey Sandtex (Ref:4.3,5,6) per QSI005 4.3 | 0.00 | | | | 4 | | | 14-5-20 |
| *150* | | | | | | | | | DAS 34 9-89 |
| Powdercoat | Memo | 0.00 | | | | | | | |
| Powder Coating | START TIME: 8:00 FINISH TIME: 8:30 OVEN TEMPERATURE: | | | | | | | | |

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|--|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence |
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| <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | | |

Work Order ID 115837

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Page 3

Item ID: D3196-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bar

Start Date: 4/25/14

Start Qty: 4.00

4

Cust Item ID:

Required Date: 4/25/14

Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

4x 14-5-22 SP

170

Identify as per dwg & Stock Location: 81259

0.00

170

Packaging

Memo

0.00

Packaging

4x 14-5-22 SP

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

14/5/22 SP
MLJ 14-05-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|--|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence |
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| | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Picklist Print

April-04-14 10:22:54 AM

Page 1

Work Order ID: 115837

115837

Parent Item: D3196-1

D3196-1

Parent Item Name: Bar

Start Date: 4/25/14

Required Date: 4/25/14

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev: A New Issue 05-11-08 JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M6061T6B0.750X01.50 0 | | Purchased | No | | | 100 | f | 25.1400 | 2.183 | 9.191579 | | | |

M6061T6B0 750X01 500

**

6061-T6 Bar .750 X 1.50

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| MAT001 | 25.14 | |
| m126647 | 2.94 | |
| m127818 | 11 | |
| m128247 | 11.2 | |

M128866 X 2.5

6.7 14/05/10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
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| Training | | | | | | | | | |
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FAULT CATEGORY

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|--|--|---|---|

| | | | |
|------------------------------|--|--------------|---------|
| DART AEROSPACE LTD | | Work Order: | 115837 |
| Description: Bar | | Part Number: | D3196-1 |
| Inspection Dwg: D3196 Rev: C | | Page 1 of 1 | |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|----------------------|------------------|--------|--------|----------------------|--------------|
| 26.094 | +/-0.010 | 26.094 | ✓ | | MJP-04 | VERN |
| 4.045 | +/-0.010 | 4.047 | ✓ | | | |
| 18.003 | +/-0.005 | 18.003 | ✓ | | | |
| 0.750 | +/-0.005 | 0.750 | ✓ | | | |
| 1.500 | +/-0.010 | 1.504 | ✓ | | | |
| Ø0.344 | +0.006/-0.001 | 0.345 | ✓ | | | |
| Ø0.660 x 100° | +0.008/-0.001 x 0.5° | 0.662 | ✓ | | | |
| 0.060 x 45° | +/-0.010 x 0.5° | 0.064 | ✓ | | | |
| (Mat stock) 0.750 | +/-0.010 | 0.752 | ✓ | | | |
| 0.250 | +/-0.010 | 0.250 | ✓ | | | |
| 3.495 | +/-0.010 | 3.490 | ✓ | | | |
| 9.000 | +/-0.010 | 8.995 | ✓ | | | |
| 16.844 | +/-0.010 | 16.840 | ✓ | | | |
| 21.498 | +/-0.010 | 21.493 | ✓ | | | |
| R0.125 | +/-0.010 | 0.125 | ✓ | | | Radius gauge |
| 1.1 00 | +/-0.010 | 1.100 | ✓ | | MJP-04 | VERN |
| R0.125 | +/-0.010 | 0.125 | ✓ | | | Radius gauge |
| 0.444 | +/-0.010 | 0.440 | ✓ | | MJP-04 | VERN |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|---------------------------------|------------------------|---------------------|-----|
| Measured by: <i>[Signature]</i> | Audited by: DAS | Prototype Approval: | N/A |
| Date: 19/05/14 | Date: 14/05/15 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------------------------------|------------|--------------------|
| A | 04.04.20 | New Issue | KJ/RF | |
| B | 06.10.24 | Dwg Rev. updated | KJ/JLM | |
| C | 07.03.21 | Dimensions updated per Dwg rev. C | KJ/JLM | <i>[Signature]</i> |

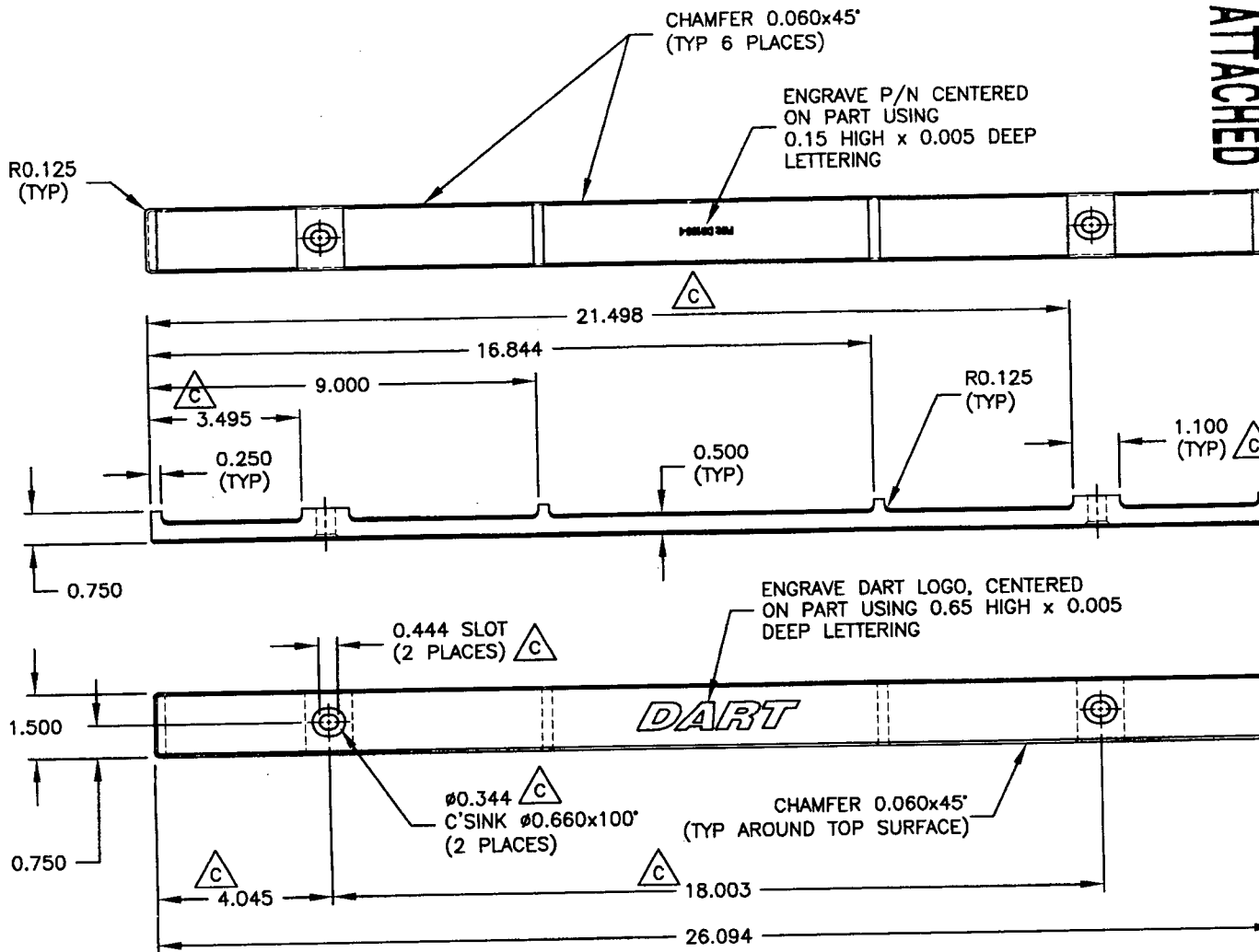
DART

RELEASED

06.10.31

DEO ATTACHED

| | | | | |
|---------|----------|-----------------------------|-------|-----------------------------|
| DESIGN | 00 | DRAWN BY | | DART AEROSPACE LTD |
| CHECKED | PH | APPROVED | | HAWKESBURY, ONTARIO, CANADA |
| DATE | 06.10.31 | TITLE | BAR | REV. C |
| | | DRAWING NO. | D3196 | SHEET 1 OF 3 |
| | | SCALE | 1:4 | |
| A | 03.06.25 | NEW ISSUE | | |
| B | 06.09.25 | ADD D3196-5 | | |
| C | 06.10.31 | ADD SLOTS ON -1; REMOVED -5 | | |



D3196-1 BAR

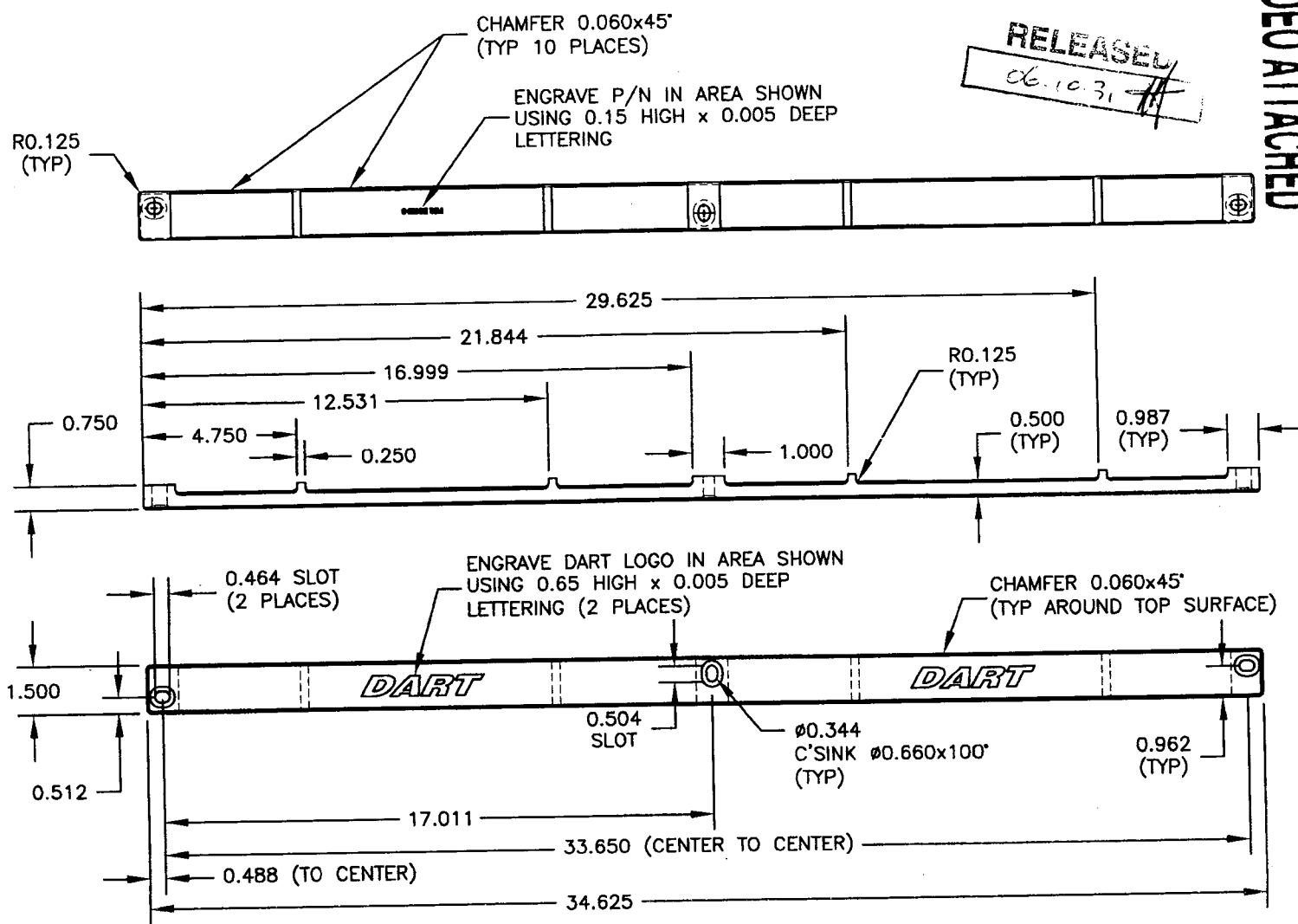
- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/B OR QQ-A-225/8) (REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

115837 MLC
14-04-05

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06.10.31



D3196-3 BAR

- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8)
(REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

| | | | | |
|---------|----------|-------------|-------|-----------------------------|
| DESIGN | QC | DRAWN BY | JR | DART AEROSPACE LTD |
| CHECKED | PH | APPROVED | JR | HAWKESBURY, ONTARIO, CANADA |
| DATE | 06.10.31 | TITLE | BAR | REV. C |
| | | DRAWING NO. | D3196 | SHEET 2 OF 3 |
| | | SCALE | 1:5 | |

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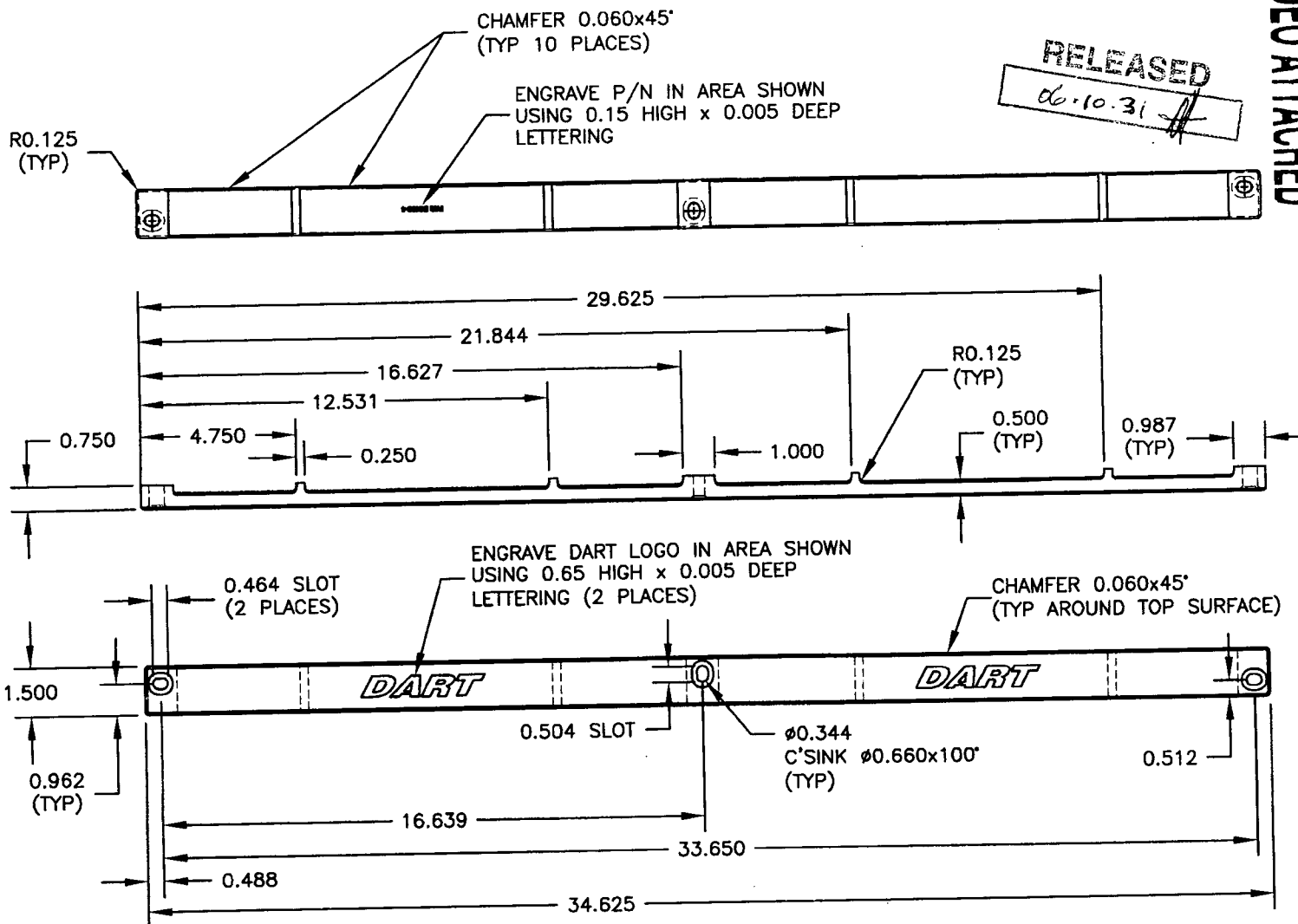
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06.10.31



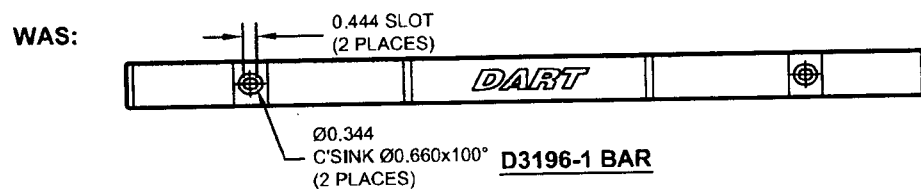
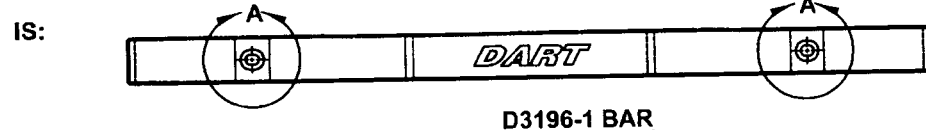
D3196-4 BAR

- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8)
(REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

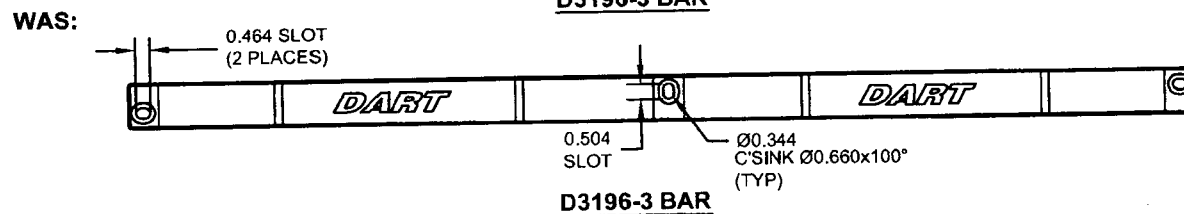
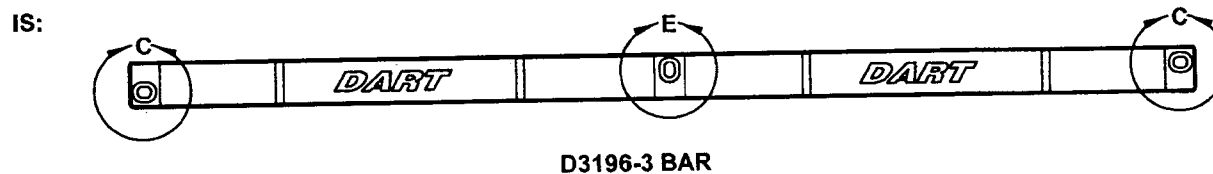
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| DESIGN | QA | DRAWN BY | QA | DART AEROSPACE LTD |
| CHECKED | RA | APPROVED | RA | HAWKESBURY, ONTARIO, CANADA |
| DATE | 06.10.31 | TITLE | BAR | REV. C |
| | | DRAWING NO. | D3196 | SHEET 3 OF 3 |
| | | SCALE | 1:5 | |

| | | | | | | | |
|----------------------|-------------------------------|----------------------------------|---|--|--------------------------------|---------------------------|--------------|
| DRAWING NO. D3196 | TITLE BAR | REV. C | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D3196-C-1 | SHEET NO. SHEET 1 OF 2 | SCALE NTS |
| DRAWN <i>AJS</i> | CHECKED <i>[Signature]</i> | MFG. APPR. <i>[Signature]</i> | APPROVED <i>[Signature]</i> | | DE APPR. <i>[Signature]</i> | | |
| DATE 08.08.27 | DATE 08.08.28 | DATE 08.08.29 | DATE 08.08.29 | | DATE 08.08.29 | DATE 08.09.04 | |

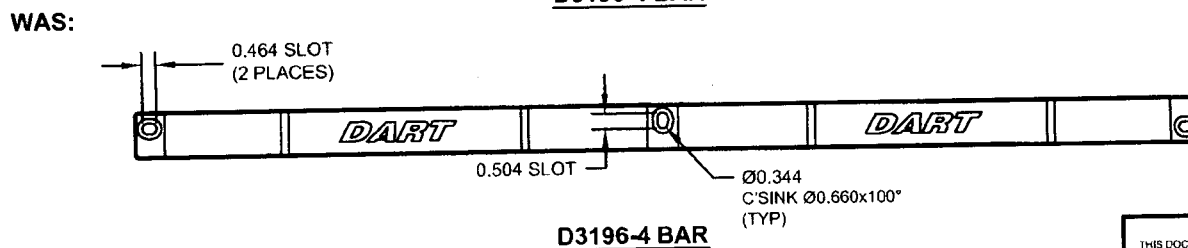
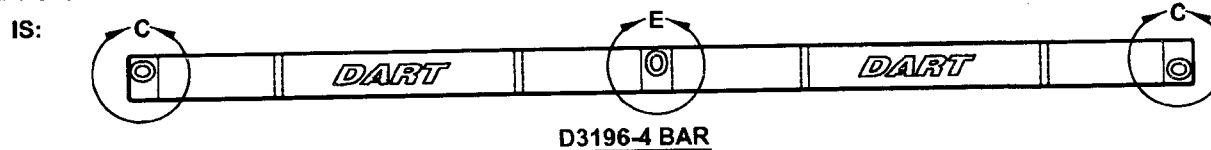
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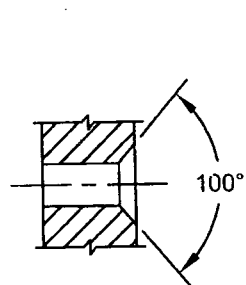
SHEET 2 MODIFY SLOT DIMENSIONING ON D3196-3 AS SHOWN:



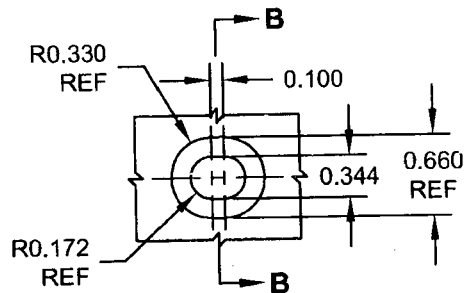
SHEET 3 MODIFY SLOT DIMENSIONING ON D3196-4 AS SHOWN:



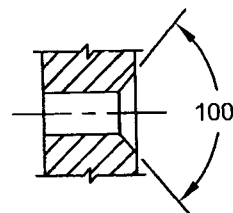
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| DRAWING NO. D3196 | TITLE BAR | REV. C | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D3196-C-1 | SHEET NO. SHEET 2 OF 2 | SCALE NTS |
| DRAWN <i>ASS</i> | CHECKED <i>[Signature]</i> | MFG. APPR. <i>[Signature]</i> | APPROVED <i>[Signature]</i> | | DE APPR. <i>[Signature]</i> | DATE <i>08.09.04</i> | |
| DATE 08.08.27 | DATE 08.08.28 | DATE 08.08.29 | DATE 08.08.29 | DATE 08.08.29 | DATE 08.08.29 | DATE 08.09.04 | |



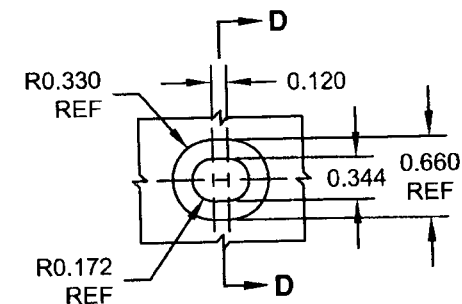
SECTION B-B



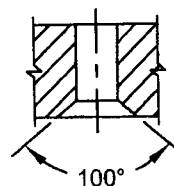
DETAIL A



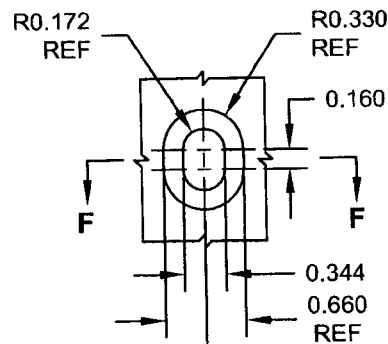
SECTION D-D



DETAIL C



SECTION F-F



DETAIL E

NOTE: THIS CHANGE HAS BEEN DONE TO CLARIFY SLOT DIMENSIONS ONLY. NO CHANGES HAVE BEEN MADE TO THE PARTS
SEE NCR 08-051 FOR FURTHER INFORMATION
ALL OTHER INFORMATION REMAINS UNCHANGED

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